

Student Assistant at HSVA

Assistance in Process Automation and Script Implementation for Maritime CFD-Simulations

Numerical simulation procedures are a substantial tool in the prediction of flow phenomena for maritime applications. Since decades, HSVA is active in the development of numerical simulation tools. To allow an efficient analysis, the simulation procedures are embedded in automated tool-chains. These tools-chains play a major role in the daily industrial business for which well-defined, efficient processes are required and are continuously improved.

Your task as student assistant is to review the existing automated tool-chain that is used for maritime CFD-simulations. Together with experts in the field of numerical simulations you will update, improve and rewrite procedures and scripts. Also, you will integrate commercial grid generation software into the automated tool-chain.

Tasks

- Review of existing processes and scripts (mainly written in PYTHON) for the conduction of maritime CFD-simulations
- Discussion and recommendation of improvements of the work flow and processes
- Update scripts to integrate new meshing software into the work flow

Requirements

- Student from the field of engineering, information technology or computational sciences
- Basic programming skills in PYTHON and LaTeX
- Experience with object-oriented programming
- Optional: Basic practical experience with maritime CFD applications
- Reliable, self-motivated working attitude

Time Period

- Start: February 2022
- Duration: approx. 3 months, option to be extended

We offer

- Regular working time will be about 9 hours per week
- Monthly compensation of 450 EUR
- Flexible working hours to arrange with e.g. lectures
- Possibility to work at the Hamburg Ship Model Basin (HSVA) and (partly) remotely from home
- Friendly and supportive working atmosphere

Kontakt

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